



Department of Development Services

Building Division

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Ronald L. Lynn, Director/Building Official

SUBJECT: TG-11-2007 APPROVAL PROCESS FOR ENGINEERED WOOD PRODUCTS

1.0 PURPOSE: This guideline sets forth the minimum procedures and standards for fabricators/manufacturers of engineered wood products. Products shall be subject to the requirements of the Clark County Department of Development Services-Building Division and all pertinent standards for inspection and analysis of procedures and products both at the fabrication shop and at the construction site. Approval and listing with Clark County is a public indication of the fabricator's/ manufacturer's dedication to produce a quality product.

2.0 SCOPE: Approved fabricator/manufacturer distinguishes an organization qualified to produce structural wood components at a location remote from the job site. Fabricators /manufacturers facilities, procedures and personnel shall be subject to periodic unannounced inspection and shall meet the requirements of this Technical Guideline and the requirements of the International Building Code, Chapter 23.

3.0 ABBREVIATIONS & ACRONYMS:

CCDDS-BD: Clark County Department of Development Services - Building Division

BAC: Clark County Building Administrative Code

IBC: International Building Code

ICC: International Code Council

QAA: Quality Assurance Agency

QC: Quality Control

TG: Technical Guideline

F/M: Fabricator/Manufacturer

APPROVED DATE: September 28, 2007
EFFECTIVE DATE: October 31, 2007

Revised by:	Concurred by:	Approved by:
/s/	/s/	/s/
Paul Lum, P.E. Senior Engineer	John S. Telford, P.E. Principal Engineer	Theodore Droessler, P.E. Manager of Engineering

4.0 DEFINITIONS: The definitions below are specific to this document and are supplemental to those contained in the Building Administrative Code of Clark County.

Fabricator/manufacturer: An organization devoted to the development of drawings and specifications depicting the requirements of engineered wood products, as well as, the operations necessary for the wood products manufacturer.

Quality Control: A managerial process which consists of the following steps: (1) evaluates actual quality performance; (2) compare actual performance to quality goals; and (3) take action on the difference.

Quality Assurance: An independent evaluation of quality-related performance, conducted primarily for the information of those not directly involved in conduct of operations but who have a need to know.

Recognized Agency: A QAA that maintains an accreditation through a nationally recognized body.

Recognized Fabricator/Manufacturer: A fabricator/manufacturer listed or maintains an evaluation report through a nationally recognized body. The evaluation report or listing is used to determine the acceptability of the quality control and quality assurance operations at the facility. The listing or report is subject to acceptance by the Building Official.

5.0 REFERENCES:

Clark County Building Administrative Code

International Building Code

Southern Nevada Amendments to the International Building and Residential Code

ANSI/TPI 1, National Design Standard for Metal Plate Connected Wood Truss Construction

6.0 RESPONSIBILITIES:

6.1 Building Division

6.1.1 Maintain an approved fabricator/manufacturer list.

6.1.2 Review requests from fabricators/manufacturers in accordance with this TG.

6.1.3 Determine the acceptance of recognized fabricators based on the applicability of the report issued by a nationally recognized body.

6.2 Approved Fabricator

6.2.1 Approved Fabricator shall apply for approval per BAC.

6.2.2 Select a QAA from CCDDS-BD approved list.

6.2.3 Keep all fabrication drawings current and notify QAA of all modifications of original approved documents.

6.2.4 Approved F/M shall provide all information upon requested.

6.3 QAA

6.3.1 QAA shall perform all duties per BAC.

6.3.2 Conduct on-site observation of the F/M's operations to assure the final product will meet reference standards.

6.3.3 Notify CCDDS-BD of any operational procedures, methods or final products that are non-compliance with reference standards.

6.3.4 Submit a final report to CCDDS-BD which details the audit scope, outlines any findings and lists recommended corrective action.

6.3.5 QAA shall respond to CCDDS-BD representative when deficiencies in reporting procedures are noted.

6.4 Recognized Fabricator:

6.4.1 Maintain an active listing with a nationally recognized body.

6.4.2 Products recognized are those under a written QC program.

6.4.3 Certificates of compliance are to be provided upon request.

7.0 **PROCEDURE:** Fabricator/manufacture organizations shall make a written request for approval. All approved organizations must have a comprehensive third party inspection program in place to monitor product quality. Only a QAA organization approved and/or recognized by CCDDS-BD shall perform the inspection program. The fabricator/manufacture may select the QAA for its ongoing plant and process certification from the CCDDS-BD-approved list.

7.1 General

7.1.1 The approved fabricator/manufacture shall pay initial listing and annual renewal fees as required by BAC, Section 22.02.385.

7.1.2 Fabricator/manufacture procedures and QC policy shall:

7.1.2.1 Be available at the plant and identify the individual who is carrying out this document.

7.1.2.2 Provide basic inspection and control of workmanship at the manufacturer's plant.

7.1.2.3 Organize all manufacturing activities such that a quality product will meet the requirements of the technical codes.

- 7.1.3** The management team must have an effective method of monitoring production to assure the QC program works to produce an acceptable product. Methods must exist which allow for special quality requirement information to flow to the responsible personnel.

7.2 Procurement

- 7.2.1** The fabricator/manufacture shall make a policy statement indicating that all materials and services are purchased based on the current adopted technical codes and reference standards and meet material specifications, including parts or components manufactured by others that will be used in the production or assembly of the finished product.
- 7.2.3** The fabricator/manufacture must check all certification of compliance documents against received materials for compliance; and shall retain the documents on file.

7.3 Engineering and Drafting

- 7.3.1** The F/M shall furnish engineer-approved drawings to production and QC personnel. A policy must exist regarding; revision, replacement and removal of drawings to and from the production line.

7.4 Production

- 7.4.1** Wood truss manufacturing operations shall be in accordance with the ANSI/TPI-1 standard and the engineer's sealed drawings.
- 7.4.2** Production operations must include written procedures for identifying and removing defective materials from production.
- 7.4.3** The F/M shall display the operations manager on the organization chart.

7.5 Audits

- 7.5.1** The QAA shall perform an initial audit of the manufacturer. The audit must confirm that the manufacturer has the policy, procedures, and personnel in place and be operating as described in their Production and QC Plan. The number of audit personnel depends on the capabilities and complexity of the organization being evaluated. The QAA will provide a written statement to CCDDS-BD certifying that the audit was performed and the results are factual.
- 7.5.2** The F/M must include a provision for periodic plant audits in the manufacturing procedural plan. The provision must state the number of inspections per approval period; unless otherwise specified by an evaluation report.
- 7.5.3** Excluding ES Reports, it is the responsibility of the QAA performing the required audits to notify CCDDS-BD in writing of any change in quality status of the approved organization. The QAA is responsible to provide CCDDS-BD with

the quarterly plant audit results within one month of the end of the calendar quarter.

- 7.5.4** CCDDS-BD may perform periodic audits to evaluate compliance with the Technical codes, reference standards, or conditions of use specified in third party listings or evaluation reports.

7.6 Approval

- 7.6.1** Fabricators may be recognized by their active listing through a nationally recognized body and be placed on the same listing as an approved fabricator.

7.6.2 Wood truss products and components:

- 7.6.2.1** Listing as an approved wood truss fabricator/manufacturer will be contingent upon providing satisfactory in-plant inspections which are performed by a CCDDS-BD-approved/recognized QAA.

- 7.6.2.2** Inspection results shall be furnished to the CCDDS-BD Inspection Division.

7.6.3 Engineered wood products other than wood truss products and components:

- 7.6.3.1** Wood products in this category are subject to the requirements of the Clark County Code.

- 7.6.3.2** Fabricators/manufacturers shall be either an approved fabricator or a recognized fabricator as stated herein.

- 7.6.3.3** Products must be stamped with the producer's trademark. The top or bottom of the member shall be identified.

8.0 RECORDS:

- 8.1** The F/M's operations manager must maintain certification records, operational history, and QAA audit reports.

- 8.2** Excluding ES Reports, CCDDS-BD will maintain copies of reports pertaining to the performance of the fabricator/manufacturer for a period of two years.

9.0 ATTACHMENTS:

None.

10.0 REVISION HISTORY:

Title	Revision/Approved Date	Effective Date
TG-11-2007	September 28, 2007	October 28, 2007
TG-11-06	August 25, 2006	September 25, 2006
TG-11-04	October 1, 2004	October 31, 2004

TG-11-98	September 1, 1998	September 1, 1998
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